

DRAWING AMENDMENTS

The claim 2 is deleted in this application. The applicant respectfully submits Figures 2 and 4 show the feature of the circuit having the guiding window that the luminary element is provided on the peripheral surface of the supporting frame within the guiding window and is electrically connected to the circuit.

REMARKS-General

1. The newly drafted independent claim 3 incorporates all structural limitations of the original claim 1 and includes further limitations previously brought forth in the disclosure. No new matter has been included. All new claims 3-15 are submitted to be of sufficient clarity and detail to enable a person of average skill in the art to make and use the instant invention, so as to be pursuant to 35 USC 112.

Regarding to Rejection of Claim 1 under 35USC102

2. The Examiner rejected claim 1 as being anticipated by Begemann (US 6,220,722). Pursuant to 35 U.S.C. 102, "a person shall be entitled to a patent unless:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States.

3. In view of 35 U.S.C. 102(b), it is apparent that a person shall not be entitled to a patent when his or her invention was patent in this country more than one year prior to the date of the application for patent in the United States.

4. However, the Begemann patent and the instant invention are not the same invention according to the fact that the independent claim 3 of the instant invention does not read upon the Begemann patent. Apparently, Begemann fails to anticipate the distinctive features of the instant invention as follows:

(a) In claim 3, "a supporting frame, which is made of good heat conduction material, has at least a **dissipating end**" is claimed for heat dissipation, wherein Begemann merely teaches the substrate 3 is connected to the gear column 1 that the substrate 1 and the gear column 1 are made of metal or a metal alloy for enabling a good heat conduction. The applicant respectfully submits that the supporting frame is a one piece body that the dissipating end is defined at one end of the supporting frame. However, Begemann merely teach the substrate 3 has the shape of pyramid with four flat surfaces while the hollow gear column 1 is connected to the vertex of the pyramid. In particularly, Begemann merely teaches, in column 3, lines 42-43, the other end of the

gear column 1 is connected to the substrate 3. In other words, Begemann fails to teach any one piece integrated the supporting frame.

In addition, Begemann merely teaches, in column 4, lines 7-16, a fan 9 is incorporated with the gear column 1 to generate an air flow for heat dissipation from the substrate and the LEDs. It is apparently the LED lamp of Begemann requires the fan for heat dissipation wherein the instant invention does not require any fan or other cooling system for heat dissipation from the luminary element.

(b) In claim 3, "the supporting frame, having an elongated structure, has a **peripheral surface** at an outer surrounding surface" is claimed, wherein Begemann merely teaches the substrate 3 has the shape of pyramid with four flat surfaces without any mention of any substrate having an elongated structure to form the peripheral surface at the outer surrounding surface.

(c) In claim 3, "at least a luminary element mounted on the peripheral surface of the supporting frame" is claimed to electrically connect to the circuit for emitting light, wherein Begemann merely teaches, in column 4, line 57, the light point 11 is placed on a so-called MC-PCB 12 without any mention of any light point 11 placed on the substrate to electrically connect to the MC-PCB 12. In addition, Begemann merely teaches, in column 4, lines 63-65, a heat-conducting adhesive between the MC-PCB 12 and substrate 3 is responsible for good heat dissipation from the LED to the substrate without any mention of any light point 11 directly mounted on the substrate 3 for direct heat transmission. Begemann is silent regarding the light point 11 mounted on the substrate 3. The applicant respectfully submits that the luminary element is mounted on the peripheral surface of the supporting frame but not to the circuit. Begemann fails to anticipate the above mention distinctive feature of the **structural relationship** between the supporting frame, the circuit and the luminary element.

(d) In claim 3, "the supporting frame is adapted for transmitting and dissipating heat from the luminary element at the dissipating end of the supporting frame" is claimed, wherein Begemann merely teaches the fan 9 at the gear column 1 for heat dissipation. Accordingly, since the luminary element is mounted on the peripheral surface of the supporting frame but not the circuit, the heat from the luminary element can be effectively and directly transmitted to the supporting frame to keep the luminary

element at an operating temperature. However, the LED lamp of Begemann teaches the heat from the light point 11 is sequentially transmitted to the MC-PCB 12, the heat-conducting adhesive, the substrate 3, and then to the gear column 1. The heat from the light point 11 will cause the overheating of the MC-PCB 12.

5. Accordingly, Begemann fails to anticipate the above distinctive features (a) to (d) of the instant invention. Begemann is not a qualified prior art of the instant invention and should be removed from the prior art list of the instant invention.

Response to Rejection of Claims 2 under 35USC103

6. The Examiner rejected claims 2 over Begemann in view of AAPA. Pursuant to 35 U.S.C. 103:

“(a) A patent may not be obtained though the invention is **not identically** disclosed or described as set forth in **section 102 of this title**, if the **differences** between the subject matter sought to be patented and the prior art are such that the **subject matter as a whole would have been obvious** at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.”

7. In view of 35 U.S.C. 103(a), it is apparent that to be qualified as a prior art under 35USC103(a), the prior art must be cited under 35USC102(a)~(g) but the disclosure of the prior art and the invention are not identical and there are one or more differences between the subject matter sought to be patented and the prior art. In addition, such differences between the subject matter sought to be patented **as a whole** and the prior art are obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains.

8. In other words, the differences between the subject matter sought to be patent as a whole of the instant invention and Begemann which is qualified as prior art of the instant invention under 35USC102(b) are obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains.

9. The applicant respectfully submits that in order to determine whether the differences between the subject matters sought to be patent as a whole of the instant

invention and the primary prior art, Begemann, are obvious in view of no other cited art, we have to identify all the differences between the claims of the instant inventions and Begemann. The applicant further identifies the differences between the claims of the instant invention and Begemann as follows:

(e) Begemann fails to teach “the circuit has a **guiding window**” is claimed in claim 4 in addition to what is claimed in claim 3 as a whole. Begemann merely teaches the MC-PCB 12 adhered on the substrate 3 by a heat-conducting adhesive without any mention of any guiding window formed at the MC-PCB 12.

(f) Begemann fails to teach the luminary element is mounted at the peripheral surface of the supporting frame **within the guiding window** to electrically couple with the circuit as claimed in claim 4 in addition to what is claimed in claim 3 as a whole. Begemann merely teaches the light point 11 is placed on the MC-PCB 12. Accordingly, forming the guiding window on the circuit, the luminary element can be mounted at the peripheral surface of the supporting frame to electrically couple with the circuit. Begemann is silent regarding the guiding window.

(g) Begemann fails to teach the luminary element has two terminal electrodes electrically coupling with the peripheral surface of the supporting frame and electrically connecting to the circuit respectively as claimed in claims 5 and 6 in addition to what is claimed in claim 3 as a whole. Begemann merely teaches the LED can be a single-chip LED or a multiple-chip LED without any mention of any connection of the LED to the substrate and the MC-PCB.

(h) Begemann fails to teach the supporting frame is an elongated solid member solidly extending from one end to another dissipating end as claimed in claims 7-9 in addition to what is claimed in claim 3 as a whole. Begemann merely teaches the substrate has the shape of regular pyramid with four flat faces.

(i) Begemann fails to teach the supporting frame a hollow member having a circular cross section as claimed in claims 10-12 in addition to what is claimed in claim 3 as a whole. Begemann merely teaches the substrate has the shape of regular pyramid with four flat faces.

(j) Begemann fails to teach the supporting frame is a hollow member having a polygonal cross section as claimed in claims 12-15 in addition to what is claimed in claim 3 as a whole. Begemann merely teaches the substrate has the shape of regular pyramid with four flat faces.

10. Whether the claims 3 to 15 as amended of the instant invention are obvious depends on whether the above differences (a) to (j) between the instant invention and Begemann are obvious at the time of the invention was made.

11. The applicant respectfully submits that the invention must be considered as a whole and there must be something in the reference that suggests the combination or the modification. See Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick, 221 U.S.P.Q. 481, 488 (Fed. Cir. 1984) ("The claimed invention must be considered as a whole, and the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination"), In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984), ("The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.") In re Laskowski, 10 U.S.P.Q.2d 1397, 1398 (Fed. Cir. 1989), ("Although the Commissioner suggests that [the structure in the primary prior art reference] could readily be modified to form the [claimed] structure, "[t]he mere fact that the prior art could be modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.")

12. In the present case, there is no such suggestion. Begemann fails to suggest the above distinctive features (a) to (j) as claimed in the instant invention. Applicant believes that for all of the foregoing reasons, all of the claims are in condition for allowance and such action is respectfully requested.

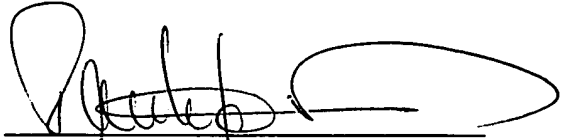
The Cited but Non-Applied References

13. The cited but not relied upon references have been studied and are greatly appreciated, but are deemed to be less relevant than the relied upon references.

14. In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration and withdrawal of the objection are requested. Allowance of claims 3-15 at an early date is solicited.

15. Should the Examiner believe that anything further is needed in order to place the application in condition for allowance, he is requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

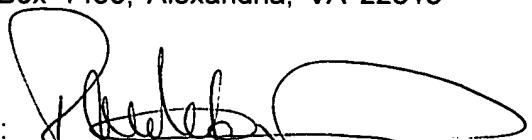


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